

JAN 11 2002  
PATENT & TRADEMARK OFFICE  
U.S. GOVERNMENT PRINTING OFFICE 45-1

#3

As a below named inventor, I declare that:

My residence, Post Office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled **Direct Writing of Optical Devices In Silica-Based Glass Using Femtosecond Pulse Lasers**.

The specification of which (check only one item below):

- is attached hereto
- was filed as United States Application Serial No. 09/954,500 on September 17, 2001  
and was amended on \_\_\_\_\_ (if applicable)
- was filed as PCT international application number \_\_\_\_\_, on \_\_\_\_\_, and was  
amended under PCT Article 19 on \_\_\_\_\_ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, § 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, § 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate or 365(a) of any PCT international application which designated at least one country other than the United States, listed below and have also identified below any foreign application for patent or inventor's certificate, on the same subject matter, having a filing date before that of the application on which priority is claimed:

- Country: \_\_\_\_\_ Application No.: \_\_\_\_\_ Filing Date: \_\_\_\_\_  
 NONE

I hereby claim the benefit under Title 35 United States Code § 119(e) and § 120 of any United States application(s) or 365(c) of any PCT international application designating the United States listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35 United States Code § 112, I acknowledge the duty to disclose material information as defined in Title 37 Code of Federal Regulations, § 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

- |   |                      |                 |
|---|----------------------|-----------------|
| <input type="checkbox"/> Provisional No.:                       | Filed:               | Status:         |
| <input checked="" type="checkbox"/> Application No.: 09/627,868 | Filed: July 28, 2000 | Status: Pending |
| <input type="checkbox"/> PCT Application No.:                   | Filed:               | Status:         |

**DECLARATION IN ORIGINAL APPLICATION****U.S. Attorney Docket No.: Borrelli 83A**

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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**Full Name of Inventor:** Nicholas F. Borrelli

**Resident Address:** 935 West Water Street, Elmira, NY 14905

**Post Office Address:** same

**Citizenship:** United States

DATE: 10/25/01

Nicholas F. Borrelli

Nicholas F. Borrelli

**Full Name of Inventor:**

Joseph F. Schroeder

**Resident Address:**

8769 Stevens Road, Lindley, NY 14858

**Post Office Address:** same

**Citizenship:** United States

DATE: 10/30/01

Joseph F. Schroeder

Joseph F. Schroeder

**Full Name of Inventor:**

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**Resident Address:**

222 Watauga Avenue, Corning, NY 14830

**Post Office Address:** same

**Citizenship:** United States

DATE: 10/25/01

Charlene M. Smith

Charlene M. Smith

**Full Name of Inventor:**

Alexander Streltsov

**Resident Address:**

15 Overbrook Road, Painted Post, NY 14870

**Post Office Address:** same

**Citizenship:** Russia

DATE: 10-30-01

Alexander Streltsov

Alexander Streltsov

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

JAN 11 2002

PATENT &amp; TRADEMARK OFFICE

Applicant(s): Borrelli et al.

Serial No.: 09/954,500

Filed: September 17, 2001

For: Direct Writing Of Optical Devices In  
Silica-Based Glass Using Femtosecond  
Pulse LasersAssistant Commissioner for Patents  
Washington, DC 20231COMBINED  
CERTIFICATE UNDER  
37 C.F.R. § 3.73(b)  
and

## POWER OF ATTORNEY

## CERTIFICATE UNDER 37 C.F.R. § 3.73(b)

**CORNING INCORPORATED**, a New York corporation, certifies that it is the assignee of the entire right, title and interest in the patent application identified above by virtue of an assignment from the inventor(s) of the patent application identified above. A true copy of the unrecorded Assignment is attached hereto.

The undersigned has reviewed the above referenced assignment of the patent application identified above and, to the best of the undersigned's knowledge and belief, title is in the assignee identified above.

The undersigned is empowered to sign this certificate on behalf of the assignee.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.



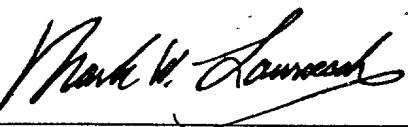
## POWER OF ATTORNEY BY ASSIGNEE

CORNING INCORPORATED, the assignee of the full and exclusive right, title and interest in and to the accompanying application for United States Letters Patent entitled **DIRECT WRITING OF OPTICAL DEVICES IN SILICA-BASED GLASS USING FEMTOSECOND PULSE LASERS** and executed by Nicholas F. Borrelli, Charlene M. Smith on October 25, 2001 and October 30, 2001, respectively, appoints the practitioners associated with the Customer Number provided below (i.e., the practitioners associated with the Patent Department, Corning Incorporated) to prosecute this application and to transact all business in the U.S. Patent and Trademark Office connected therewith. Please direct all correspondence to Thomas Ryan at the address associated with that Customer Number.

Customer Number: 29988

CORNING INCORPORATED

Date: November 1, 2001

By   
Mark W. Lauroesch  
Assistant Secretary

**COPY****ASSIGNMENT**

FOR VALUE RECEIVED, I, as a below named inventor, hereby sell, assign and transfer unto Corning Incorporated, a corporation organized and existing under the laws of the State of New York, having its principal place of business at Corning, New York, (hereinafter CORNING), as assignee, and unto its successors, assigns and legal representatives, the entire right, title and interest, for all countries, in and to certain inventions relating to a **Direct Writing of Optical Devices In Silica-Based Glass Using Femtosecond Pulse Lasers**, such inventions being generally described in an application for Letters Patent of the United States executed on

<i>DATE</i>	October 25, 2001
<i>DATE</i>	October 30, 2001
<i>DATE</i>	October 25, 2001
<i>DATE</i>	October 30, 2001

and in any future patent applications claiming the benefit of the filing date of that application, and all the rights and privileges under any and all Letters Patents that may be granted therefore.

I request that any and all patents for said inventions be issued to CORNING, its successors, assigns and legal representatives, or to such nominees as CORNING may designate.

I agree that, when requested, I will, without charge to CORNING and at CORNING's expense, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable or convenient for securing and maintaining patents for said inventions in any and all countries and for vesting title thereto in CORNING, its successors, assigns and legal representatives or nominees.

I authorize and empower CORNING, its successors, assigns and legal representatives or nominees, to invoke and claim for any application for patent or other form of protection for said inventions filed by it or them, the benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for said Convention or entered as a supplement to, and to invoke and claim such right of priority without further written or oral authorization.

I hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any assignment, consent to file or like document which may be required in any country for any purpose and more particularly in proof of the right of CORNING, or its successors, assigns and legal representatives or nominees to claim the aforesaid benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it or entered as a supplement to it.

I covenant with CORNING, its successors, assigns and legal representatives or nominees, that the rights and property herein conveyed are free and clear of any encumbrance, and that I have full right to convey the same as herein expressed.

Signed at Corning, NY, this

10/25/01  
Date

Nicholas F. Borrelli  
Nicholas F. Borrelli

10/30/01  
Date

Joseph F. Schroeder  
Joseph F. Schroeder

10/25/01  
Date

Charlene M. Smith  
Charlene M. Smith

10-30-01  
Date

Alexander Streltsov  
Alexander Streltsov

State of New York)

: ss.

County of Steuben)

On the 25<sup>th</sup> day of October 2001, before me personally came Nicholas F. Borrelli known to be the person described in and who executed the foregoing instrument, and acknowledged that they executed the same.

Colleen E. Doherty  
Notary Public

COLLEEN E. DOHERTY

Notary Public, State of New York

Qualified in Steuben County No. 01DO6040673

My Commission Expires April 24, 2002

State of New York)  
: ss.

County of Steuben)

On the 30<sup>th</sup> day of October 2001, before me personally came Joseph F. Schroeder known to be the person described in and who executed the foregoing instrument, and acknowledged that they executed the same.

Colleen E. Doherty  
Notary Public

COLLEEN E. DOHERTY

Notary Public, State of New York

Qualified in Steuben County No. 01DO6040673

My Commission Expires April 24, 2002

State of New York)  
: ss.

County of Steuben)

On the 25<sup>th</sup> day of October 2001, before me personally came Charlene M. Smith known to be the person described in and who executed the foregoing instrument, and acknowledged that they executed the same.

Colleen E. Doherty  
Notary Public

COLLEEN E. DOHERTY

Notary Public, State of New York

Qualified in Steuben County No. 01DO6040673

My Commission Expires April 24, 2002

State of New York)  
: ss.

County of Steuben)

On the 30<sup>th</sup> day of October 2001, before me personally came Alexander Streltsov known to be the person described in and who executed the foregoing instrument, and acknowledged that they executed the same.

Colleen E. Doherty  
Notary Public

COLLEEN E. DOHERTY

Notary Public, State of New York

Qualified in Steuben County No. 01DO6040673

My Commission Expires April 24, 2002